



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,524	04/05/2007	Thomas N. Horsky	211843-00047	1041

27160 7590 06/24/2008
PATENT ADMINISTRATOR
KATTEN MUCHIN ROSENMAN LLP
1025 THOMAS JEFFERSON STREET, N.W.
EAST LOBBY: SUITE 700
WASHINGTON, DC 20007-5201

EXAMINER

SOUW, BERNARD E

ART UNIT	PAPER NUMBER
----------	--------------

2881

MAIL DATE	DELIVERY MODE
-----------	---------------

06/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,524	Applicant(s) HORSKY ET AL.	
	Examiner BERNARD E. SOUW	Art Unit 2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08/21/2006 (PreAmdt).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 28-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 64 is/are rejected.
- 7) ☒ Claim(s) 28-63, 65 and 66 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/13/07 + 8/21/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Preliminary Amendment

1. The Preliminary Amendment filed on 08/21/2006 has been entered. The present Office Action is made with all the suggested amendments being fully considered.

Claims 2-27 have been cancelled.

New claims 28-66 have been added.

Claims 1 and 28-66 are pending in this Office Action.

Information Disclosure Statement

2. Receipt is acknowledged of information disclosure statements (IDS) submitted on 12/13/2007 and 08/21/2006. The submission is in compliance with the provisions of 37 CFR 1.97.

Signed copies of the information disclosure statements are here enclosed.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 371, PCT/US04/41060 filed on 09 December 2004, which claims further priority to a U.S. provisional application filed on 12 December 2003, which papers have been placed of record in the file.

Abstract

4. The Abstract of the disclosure is objected to because it is not written on a separate sheet, but as part of a publication of a corresponding PCT application.

Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed **150** words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Double Patenting

Statutory (35 U.S.C. 101) Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467,

Art Unit: 2881

114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

5. Claim 1 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1 of copending Application No. 11/648365.

Claim 1 contains allowable subject matter for reciting a closed-loop control system for vapor delivery that is constructed to vary the conductance of a throttle valve so that the flow of vapor to the vacuum chamber thereby being determined by pressure of the vapor in the region of the passage between the throttling valve and the vapor conduit.

This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Non-Statutory Type Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

Art Unit: 2881

patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Obviousness Type Double Patenting

6. Claim 64 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending U.S. Patent Application No. 11/648,365. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

The control system recited in the present claim 64 is exactly the same as the system used in the vapor delivery system recited in claim 1 of copending U.S. Patent Application No. 11/648,365; the only difference being found only in their preamble, which is here not given a full patentable weight.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 28-63, 65 and 66 are objected to as being dependent upon a rejected base claim(s), but would be allowable upon obviating the present rejection of the respective parent claims, or if rewritten to overcome the applicable rejection(s) and to include all of the limitations of the base claim and any intervening claims.

Indication of Allowable Subject Matter

8. Claim 1 contains allowable subject matter provided it is so amended to become an Obviousness Double Patenting rejection, which can be then allowed upon receipt of a Terminal Disclaimer by the office.

9. Claim 64 contains allowable subject matter after upon receipt of a Terminal Disclaimer by the office.

10. Claims and 64 contain allowable subject matter for reciting a closed-loop control system for delivery of sublimated vapor that is *constructed to vary the conductance of a throttle valve* such that the flow of vapor to the vacuum chamber is thereby determined by the vapor pressure in the region of the passage between the throttling valve and the vapor conduit.

11. Claims 28-63, 65 and 66 also contain allowable subject matter for being dependent, either directly or indirectly, on previously allowable claims 1 or claim 64.

Relevant Prior Art

9. This prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

(a) USPGPub 2007/0210260 and USPGPub 2008/0121811, both issued to Horsky et al., disclose a closed-loop control system for delivery of vapor or gas that is *constructed to vary the conductance of a throttle valve*. However, the inventions are not directed to a vapor sublimated from solid materials, but to an ion source.

(b) USPGPub 2003/0030010 issued to Perel et al.; USPAT 5,887,117 issued to Desu et al.; USPAT 6,107,634 issued to Horsky; USPGPub 2005/0263075 and USPAT 6,909,839 issued to Wang et al.; and USPAT 7,050,708, USPAT 6,839,505 and USPAT 6,701,066 issued to Sandhu; all eight references disclose a closed-loop control system for delivery of vapor sublimated from solid materials. However, the control system fails to vary the conductance of a throttle valve.

(c) USPAT 6,452,338 issued to Horsky, USPAT 6,712,084 issued to Shojii et al., and USPAT 5,451,258 issued to Hillman et al., all three references disclose a closed-loop control system for delivery of vapor or gas. However, the control system fails to vary the conductance of a throttle valve. Furthermore, the invention is not directed to a vapor sublimated from solid materials.

(d) USPGPub 2007/0186983 and USPGPub 2006/0237063, both issued to Ding et al., and USPGPub 2006/0237136 issued to Nguyen et al., all three references disclose a closed-loop control system for delivery of vapor or gas that is constructed to vary the conductance of a throttle valve. However, the inventions are not directed to a vapor sublimated from solid materials. Furthermore, all three references are predated by the priority date (12/12/2003) of the present application.

Communications

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard E Souw, Ph.D., whose telephone number is

571 272 2482. The examiner can normally be reached on Monday thru Friday, 9:00 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on 571 272 2293. The central fax phone number for the organization where this application or proceeding is assigned is 571 273 8300 for regular communications as well as for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571 272 5993.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Bernard E Souw/
Primary Examiner, Art Unit 2881